

Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation

COMMON NAME	Little Bluestem - (Sideoats Grama, Blue Grama) / Threadleaf Sedge Herbaceous Vegetation
SYNONYM	Northern Great Plains Little Bluestem Prairie
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (V.A.5.N)
FORMATION	Medium-tall sod temperate or subpolar grassland (V.A.5.N.c)
ALLIANCE	<i>Schizachyrium scoparium</i> - <i>Bouteloua curtipendula</i> Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Upland

RANGE

Globally

This community is found in western North Dakota, western South Dakota, eastern and northern Wyoming, central and eastern Montana, southern Saskatchewan, and southern Manitoba.

Wind Cave National Park

Extensive areas of little bluestem vegetation can be found in the eastern half and southwest quarter of the Park, which are predominantly grassland. In these areas, little bluestem often occurs with western wheatgrass and Kentucky bluegrass vegetation. The little bluestem community typically occurs on steeper slopes, with Kentucky bluegrass and western wheatgrass vegetation on gentler slopes and in swales. Stands also occur in other areas of the Park in openings in forests and woodlands.

ENVIRONMENTAL DESCRIPTION

Globally

This community is usually found on moderate to steep slopes with variable aspects. The soils are typically shallow and occur over sandstone or limestone.

Wind Cave National Park

Little bluestem stands occur on slopes of variable steepness and aspect, as well as on level sites. However, sites generally are drier, steeper and/or have poorer soils than sites that support Kentucky bluegrass and western wheatgrass - green needlegrass vegetation types.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Herbaceous	<i>Schizachyrium scoparium</i>

Wind Cave National Park

<u>Stratum</u>	<u>Species</u>
Herbaceous	<i>Bouteloua curtipendula</i> , <i>Schizachyrium scoparium</i>

CHARACTERISTIC SPECIES

Globally

Bouteloua curtipendula, *Bouteloua gracilis*, *Carex inops* ssp. *heliophila*, *Schizachyrium scoparium*

Wind Cave National Park

Bouteloua curtipendula, *Carex inops* ssp. *heliophila*, *Schizachyrium scoparium*

VEGETATION DESCRIPTION

Globally

The vegetation is predominantly composed of graminoid species less than 1 m tall with moderate to high cover. The dominant species is *Schizachyrium scoparium* with *Bouteloua curtipendula*, *B. gracilis*, and *Carex filifolia* as associates or codominants. *Andropogon*

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Wind Cave National Park

gerardii, *Carex inops* ssp. *heliophila*, *C. eleocharis*, *Koeleria macrantha* and *Calamovilfa longifolia* are often present. *C. longifolia* may be abundant on sandier soils. *Muhlenbergia cuspidata*, *Stipa comata*, *Pascopyrum smithii*, and *Nassella viridula* may also be present. Forbs do not contribute greatly to the canopy, but many species may be found in this community. Among the forbs that may be found are *Echinacea angustifolia*, *Aster oblongifolius*, *Gaura coccinea*, *Lygodesmia juncea*, *Helianthus pauciflorus* ssp. *pauciflorus*, *Rosa arkansana*, *Liatris punctata*, *Pedimelum argophyllum* (= *Psoralea argophylla*), *Aster ericoides*, *Dalea purpurea*, and *Campanula rotundifolia*.

Wind Cave National Park

Stands of little bluestem typically have somewhat sparse to moderate herbaceous cover, ranging from 20 to 75%. Little bluestem (*Schizachyrium scoparium*) is strongly dominant. Side-oats grama (*Bouteloua curtipendula*) occurs frequently, and may be codominant. Threadleaf sedge may or may not be present. Other frequently-occurring graminoids include blue grama (*Bouteloua gracilis*), hairy grama (*Bouteloua hirsuta*), junegrass (*Koeleria macrantha*) and needle-and-thread (*Stipa comata*). A wide variety of forbs may be present in small amounts, with white sagebrush (*Artemisia ludoviciana*) the most common. Low shrubs are often present, but with less than 20% cover typically. Prairie sagebrush (*Artemisia frigida*) is the most common shrub species found.

OTHER NOTEWORTHY SPECIES

CONSERVATION RANK G3

DATABASE CODE C EGL001681

MAP UNITS

The little bluestem - grama grass/threadleaf sedge community corresponds to map unit 15, little bluestem - grama grass/threadleaf sedge herbaceous vegetation, on the Wind Cave vegetation map. Little bluestem grassland with standing dead trees and few or no living trees corresponds to map unit 13, little bluestem - grama grass - threadleaf sedge herbaceous vegetation (with burned ponderosa pine).

COMMENTS

Wind Cave National Park

Significant amounts of little bluestem can be found occasionally in other grassland types, especially the western wheatgrass - green needlegrass type. Kentucky bluegrass often forms a mosaic with western wheatgrass and little bluestem vegetation. The little bluestem community typically occurs on steeper slopes, with Kentucky bluegrass and western wheatgrass vegetation on gentler slopes and in swales.

Little bluestem vegetation is very common. Many stands were visited in preparing the vegetation map. Extensive areas of Kentucky bluegrass vegetation can be found in the eastern half and southwest quarter of the Park, which are predominantly grassland. Smaller stands occur in other areas of the Park in openings in forests and woodlands.

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